

Ipa

- Gravity **21.3 BLG**
- ABV **9.5 %**
- IBU **56**
- SRM **50.4**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **7 liter(s)**
- Trub loss **10 %**
- Size with trub loss **8.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **8 %/h**
- Boil size **9.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **15.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **liter(s)** of **76C** water or to achieve **9.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.2 kg (69.8%)	80 %	5
Grain	Strzegom Wiedeński	0.5 kg (15.9%)	79 %	10
Grain	Strzegom pszenica prażona	0.2 kg (6.3%)	70 %	1000
Grain	Weyermann - Chocolate Wheat	0.25 kg (7.9%)	74 %	1000

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Oktawia	20 g	60 min	7.8 %
Aroma (end of boil)	Oktawia	20 g	5 min	7.8 %
Whirlpool	Oktawia	20 g	5 min	7.8 %
Dry Hop	Oktawia	30 g	3 day(s)	7.8 %
Boil	Oktawia	10 g	40 min	7.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis